

KNOWLEDGE TRANSFER

AND

INNOVATION

In the Wales Rural Development Plan

& European Innovation Partnership

2014-2020









EXECUTIVE SUMMARY

This executive summary provides an overview of research carried out by the Wales Rural Observatory between February and May 2013, to analyse knowledge transfer and innovation activities of relevance to the Wales Rural Development Plan (RDP) and European Innovation Partnership (EIP).

This report was commissioned in light of prioritisation of Knowledge Transfer and Innovation as a key theme informing the forthcoming Rural Development Plan (as shown in figure 1). Knowledge Transfer and Innovation are also central to the delivery of the Agricultural Productivity and Sustainability European Innovation Partnership (EIP), which forms a wider underpinning role in the EU's Innovation Union, and Europe 2020 Smart Growth Strategy.

The aims of the analysis are to:

- Collate the knowledge transfer and innovation activities of relevance to the Wales RDP and EIP
- Assess their effectiveness, resources and capacity
- Inform recommendations for the structure of the next RDP and EIP

In the first instance, a review was conducted to identify key themes raised in the policy and academic literature to inform the methodology and subsequent analysis. This revealed a general shift towards a conception of innovation and learning based on *knowledge exchange*, which requires further support for wider participation and an applied research focus.

In addition, three key themes emerged which then informed the analytic focus of the report:

- Innovation is a social process.
- Knowledge is socially constructed.
- Innovation occurs through knowledge exchange.

These findings demonstrated the need for a socially attuned approach to evaluation, which considers interrelations, trust, power, social capital and networking. This was captured by a focus on *who* is involved and *how* knowledge is developed and mobilised. The methodology applied incorporated these points as a means to provide more theoretically robust and refined insights. This involved the following phases of data collection:

- A desk based assessment of knowledge transfer and innovation initiatives of relevance to the Wales RDP and EIP.
- One-to-one interviews with key stakeholders involved in the provision and management of knowledge transfer and innovation in Wales.
- A stakeholder consultation event to gather feedback from a wider array of stakeholders involved in the provision and management of knowledge transfer and innovation in Wales.

RECOMMENDATIONS

*Recommendations are not in an order of priority

- 1. Policy makers and practitioners should add-value to the RDP by supporting greater cooperation, collaboration and co-ordination across and beyond the Programme. This will also serve to support the function of the EIP as a knowledge sharing network.
 - There is a lot of talent, expertise and resources in Wales, in relation to agricultural research and extension services, and wider rural business development; but it is fragmented and sometimes unnecessarily competitive.
 - It is necessary to provide further integration of fragmented elements of the advice and delivery mechanisms. This will include support for effective platforms for communication and collaboration between key actors, such as Farming Connect, the Levy Bodies and Higher / Further Education colleges.
 - There is a wide array of actors who are involved in providing advice to farmers and rural businesses. It is important to ensure coherence between their messages and make best use of individuals who have regular contact with farmers and rural businesses to communicate key messages. (for example, see RELU's Landbridge).
 - A co-ordinating and capacity building approach is an effective way to gain wider coverage and impact; as demonstrated by the Tyfu Pobl scheme and PLANED, who have achieved success by focusing on knowledge brokering and facilitation.
 - Working with the private sector, a culture of co-operation could be nurtured through the RDP by supporting platforms for pre-competitive co-operation, such as 'Farming Futures'. This could help to address question of public good such as carbon reduction, soil health and animal welfare.
 - There is potential to link up with cross-border partners (e.g. the Agricultural and Horticultural Development Board and Further Education colleges), as we face similar challenges and many useful resources are hosted in England.

2. Knowledge *exchange* should be used as the guiding principle for learning, information sharing and innovation within and across the RDP and EIP.

- Knowledge exchange promotes the principle that advisory and support services are enabling and empowering processes. It is also more effective for engaging people, and enables the development of more appropriate knowledge that is better connected to peoples' needs.
- This can be practically mobilised through participatory research and using a range of approaches in the provision of extension, including discussion groups and peer-to-peer learning. Effective communication and evaluation channels are also critical here (in line with other recommendations made).

3. Trust is essential for effective knowledge exchange and innovation; ensure it is there from the start and continues to be nurtured through-out.

- Building trust and social capital takes time and requires continuity.
- Avoid short term contracts for the provision of long term services and/or try to maintain continuity between contracts, in both branding and the individuals

- involved. Otherwise, there is a danger of losing skilled staff and their knowledge base as well as creating a breakdown in trust with the target audience.
- Stakeholder feedback demonstrates that many RDP interventions are not selfsustaining without continued public funding. Stakeholders and Government should reflect on how funding gaps or 'exit strategies' can be managed.
- Make sure that interventions build on best practise. Take care not to reinvent or alter things that are working well, as this breaks trust.
- Use local actors who are well known and connected with the target audience whenever possible. Equally, the perceived credibility and legitimacy of knowledge sources and actors involved is critical to their success. Here we need to be aware of 'circles of trust'. Peer-peer and one-to-one learning is useful, as well as working with targeted groups who have a shared sense of identity / interest.

4. The guiding principles for the development and implementation of the RDP and Welsh Government rural policy should be clarity and coherence.

- The Welsh Government should set a clear and coherent strategy for rural development and the land economy in Wales. A clear direction of travel and well defined targets are currently lacking, and will provide a focus to unite the agricultural and land-use sector.
- Coherent policy is particularly important to ensure the delivery of sustainable intensification in the agricultural sector.
- The Welsh Government should clearly set out the function, objectives and how the EIP will operate to the appropriate audiences within Wales, in order to ensure that it is accessible and comprehensible.
- Use reinforcing and repeated messages and actions.
- In order to simplify access to RDP resources, a single portal would be useful for some aspects of delivery. This would not be exclusive, so schemes and grants can be accessed independently, but a central access portal could provide sign-posting and advice for those who need it.
- Ensure adequate signposting across the spectrum of available business advice so beneficiaries are made aware of appropriate services. Clearer information and signposting for government schemes is also needed. The Glastir schemes have suffered as a consequence of weak communication.

5. Communication should be adapted to acknowledge difference in regional / local contexts; audience typology; and learning styles.

- Using a range of techniques under one programme, from one-to-one advice and mentoring through to group learning, has been successful in previous iterations.
- It is important to use appropriate language, both in terms of accessible terminology and jargon, and providing Welsh language provision.
- The public and private sector work through different channels and forums, so it is important to engage them both appropriately.

- Exchange of specialist knowledge is important to attract and retain audiences; individuals want to work closely with similar business types to advance and exchange knowledge.
- One-to-one advice and mentoring is often more appropriate when individuals are not confident, or uncomfortable discussing sensitive information (e.g. financial or personal) in a group context. It can also enable a more tailored approach.

6. Knowledge transfer/exchange is most effective through visual and applied methods. This principle should inform individual interventions and wider funding strategies for supporting demonstration sites and programmes that stimulate applied and active knowledge exchange.

- Whilst individuals have different learning preferences, and text-based material remains popular, those engaged in the land-based economy are often kinaesthetic learners.
- RDP investment should be used to support and expand the existing network
 of demonstration and development farms across Wales. These can be run in
 partnership with Further and Higher Education Institutes and private sector
 commercial farms. This will fit with the EIP operational group structure and
 links to the Horizon 2020 research priorities.
- RDP monies should support study visits to these sites and others further afield across Europe and internationally; this would support the proposed information exchange model for the EIP.

7. Greater emphasis and support is needed for applied research within agriculture and sustainable land management.

- There is a shortfall in applied research created by the current prioritisation of basic science, which needs to be addressed to meet the aims of the EIP (to increase agricultural outputs and reduce environmental degradation).
- This objective can also be supported by providing RDP support for more regional demonstration and development work (outlined above). Developing locally appropriate solutions through such a network is also critical to meet the goals for sustainable intensification outlined by the EIP.
- This will require partnerships and match-funding with Higher and Further Education Institutes and the private sector; particularly as industry invests substantially in applied work through R&D.
- This should include demand driven and participatory research that works with a range of actors, within and beyond supply chains, who are involved in all stages of the research from commissioning through to dissemination (see for example, New Zealand's Sustainable Farming Fund, RELU in the UK and the Pontbren Project in Wales).
- There is a need for greater levels of interface between academics, advisory professionals and farmers, across Wales, in order to exchange information about research priorities and disseminate findings. This will ensure that research is commercially applicable. The EIP operational groups could be used to enable these knowledge exchange meetings.

- The Welsh Government should provide political support for knowledge exchange as a key priority for UK Research Councils.
- Funding for applied institutes needs to be restored in order that expertise and professional development can be reinstated in this area. This could be done in part with core funding (see e.g Teagasc in Ireland). Ser Cymru could also support an applied approach to address the skills shortage in this area.

8. Policy makers and practitioners need to work with business priorities to create greater incentives for knowledge exchange and innovation.

- It is important to present a good business case to 'sell' information and raise awareness of the return on investment for participation in different initiatives. This is particularly useful when communicating material on environmental and regulatory issues, which beneficiaries may otherwise be less inclined to engage with.
- Whilst paying for advisory services can be useful to create participant 'buy-in', past experience in Wales demonstrates that subsidisation of services is necessary to maintain uptake.
- To ensure effective use of public money, there is potential to attach conditions to the receipt of advisory services, such as requiring farmers to undertake training, business planning, or participate in benchmarking.
- Benchmarking is essential for raising standards and incomes within the land economy. Whilst it has been promoted through the current Programme, it needs to be taken forward as a means to proactively develop business and record-keeping skills. Benchmarking and performance indicators need to be easily measurable, practical, comparable, useful and quick.

9. There needs to be a greater prioritisation of professional development within the land economy, in order to raise the status and standards of the sector and provide more attractive employment prospects.

- The rural and land based sectors currently lag behind other areas of industry in terms of professional status and opportunities for career development.
- The enhanced professional status of the land-economy should connect with wider rural development strategy and be supported by a strong message from Government on the potential of rural areas as key sites for the future of the Green Economy.
- We need to make better use of graduates within Wales to raise standards across industry. This can be done through initiatives such as the Food Industry Centre's KITE scheme, and through the conduct of more applied and participatory research programmes.
- There is a need to promote training, Continuing Professional Development and professional support networks amongst land economy professions and advisors. This could also be used to speed up the rate of knowledge transfer from research to industry.

- 10. Current methods of administering and evaluating the RDP need to be adapted to ensure a more flexible and responsive Programme. This should embed a better framework for evaluating knowledge exchange and ensure more effective learning across and between Programmes.
 - Knowledge exchange needs to be supported across the RDP and not restricted to a specific pot within the Programme.
 - There is no clear framework currently in use for evaluating knowledge exchange and innovation within the RDP.
 - Current metrics centred on measurable outputs, such as numbers of participants, have not effectively captured what learning has taken place or how effective knowledge exchange has been. A focus on *outcomes* may be more effective. Soft knowledge and subjective indicators are appropriate and already being used to measure outcomes in some initiatives.
 - Learning and innovation are long-term processes that occur in complex cycles. Therefore, we should not delimit evaluation to individual events or interventions. However, outcomes should be defined and benchmarks established in order to compare changes and outcomes over time.
 - Innovation involves risks and sometimes failure, which should not be penalised if a culture of innovation is to be effectively nurtured in Wales.
 - It is important to ensure that flexibility and on-going evaluations are built-in to the RDP specifications.
 - Current evaluation is often conducted in a way that does not foster ownership
 or inclusion of the participating groups; some element of self-evaluation
 should be present and on-going.
 - The sharing of learning and best-practice across different schemes and initiatives is not currently effective. Improving the process of evaluation as outlined could improve this, but equally a central portal and/or network for knowledge exchange is needed to work to this end. There is a potential role for both the Wales Rural Network and Farming Connect to contribute in this regard.

11. There needs to be a shift in mind-set to 'focus on the problem not the funding pot'.

- Activities with the rural sector are often defined by their multifunctionality and associated potential to connect across agendas for social well-being and cohesion, and economic and environmental prosperity. This clearly demonstrates the importance of thinking beyond silos and administrative divisions.
- We should not limit ourselves to thinking only within the parameters of the RDP to address areas of need. Instead the RDP provides an opportunity to tackle Welsh specific problems in a pro-active manner. So we should look to the ways in which the RDP can work with and add-value to other areas of funding and private investment.